Chapter 1
The UID Project: Lessons Learned from the West and Challenges Identified for India

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ABSTRACT

The Indian government has undertaken a major effort to issue Unique Identification Numbers (UID) to its citizens. This chapter examines the Social Security Number system in the US, and investigates other UID projects in Europe. Based on these understanding and other information around UID systems, the authors discuss possible issues that are expected to arise in the implementation of UID system in India. They articulate how biometrics is being advocated by the proponents of the system in India for unique identification. The authors elucidate the social, ethical, cultural, technical, and legal implications / challenges around the implementation of a unique identification project in India.

1 INTRODUCTION

The Unique Identification (UID) initiative is a forthcoming and highly ambitious project in India where each resident of India will be issued a unique number that can be used lifelong and anywhere (Rai, 2009). The central government under the leadership of Mr. Nandan Nilekani, Minister of State, created the Unique Identification Authority of India (UIDAI), an agency responsible for implementing the envisioned Multipurpose National Identity or Unique Identification (UID Card) project in India. UIDAI will be responsible for issuing the numbers; but individual government ministries and agencies will be responsible for integrating the numbers with their respective databases (e.g. The Union Labor Ministry will
be responsible for Employment Provident Fund). The Indian government believes this unique identification will save identity verification costs for businesses (Hindu, 2009), especially by virtue of a system that facilitates online verification of authentication of an identity. To enable this fast verification, UIDAI will be building a central database on details of every Indian citizen including demographic and biometric information (Thapar, 2009). Such a centralized system invites the questions about single point of failure and potential abuse from inside the central government. Given that UIDAI aims to make verification easier for both organizations in both private and public sectors through a central database, it is important to understand potential loopholes that include breach of privacy, and targeted advertising in the context of cultural, administrative and bureaucratic practices as well as the contemporary technological and legal issues in India.

For the purpose of this paper, we assume that the Unique Identifier is similar to the Social Security Number in the US and to the proposed but now scrapped National Identity scheme in the UK as well as similar but active systems in some other EU countries. Even though the motivation for the UID in India is to provide services to citizens living in rural parts of India, at a broad level the idea is to create unique identifier which is same as in other countries. Based on this assumption we draw inferences that can be helpful in designing and deploying the UID scheme in India.

We discuss the evolution of SSN (Puckett, 2009). Although the Social Security Administration (SSA) has made the card counterfeit-resistant, the card does not contain information that would allow it to be used as proof of identity. However, the simplicity and efficiency of using a unique number that most people already possess has encouraged widespread use of the SSN by both government agencies and private enterprises, especially as they have adapted their recordkeeping and business systems to automated data processing. Apart from US (Rengamani, et al., 2010), we also study similar initiatives in several European countries and have discussed the ethical, social and other challenges faced in their respective countries. In particular we will look at the challenges faced in the UK that proved too high to overcome for their proposed National Identity Card and Registry system. These will be synthesized into a broad set of challenges that Indian authorities must look out for when designing and implementing UID.

In Sections 2, 3 and 4 we discuss briefly the issues faced in SSN in the US, describe the National identity schemes in the UK (proposed but not cancelled) and other EU countries. In Section 5, we discuss in detail the challenges that we anticipate in implementing UID in India and then in Section 6, we provide specific recommendations based on our analysis. We also discuss issues that impact a biometric unique identifier initiative. Finally, in Section 7, we conclude the paper with our observations.

2 SOCIAL SECURITY NUMBER (SSN) IN THE US

Before citing the similarities and differences of the SSN, it is important to study the evolution of SSN. The SSN was primarily designed to enable the Social Security Board to maintain accurate records of the earnings of individuals who worked in jobs covered under the Social Security program (Acquisti & Gross, 2009). The card was never intended to serve as a personal identification document - that is, it does not establish that the person presenting the card is actually the person whose name and SSN appear on the card. Although Social Security Administration (SSA) has made the card counterfeit-resistant, the card does not contain information that would allow it to be used as proof of identity. However, the simplicity and efficiency of using a unique number that most people already possess has encouraged widespread use of the SSN by both government agencies and private enterprises, especially as they have
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